

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

Please cancel claims 26 and 27.
Amend claims 4, 5, 10-13, 15-19, 21-22, and 24-25.
Add claims 28 and 29.

4. (Currently Amended) A system for synchronizing isochronous [data] packets for delivery to a device, the system comprising:

an isochronous data processor configured to process said isochronous [data] packets, said isochronous data processor inserts a data marker at beginning of each of said isochronous [data] packets;

a firmware control configured to control operation of said isochronous data processor; and

a storage medium for storing said data markers and their associated isochronous [data] packets, wherein said isochronous data processor uses said data marker to re-synchronize data delivery to said device when said data delivery contains a corrupted packet;

in response to a request for delivery of the stored data packets, said firmware control adapted to synchronize the delivery process by discarding packets acquired from said storage medium until a packet that defines a frame boundary is located and then delivering packets to the device.

5. (Currently Amended) The system according to claim 4, wherein said data delivery is re-synchronized in that said data delivery begins with an isochronous [data] packet which corresponds to a next frame boundary.

6. (Previously Amended) The system according to claim 4, wherein said isochronous data packets are transmitted in accordance with IEEE 1394 specification.

7-9. (Canceled)

10. (Currently Amended) A method for synchronizing isochronous data delivery, comprising:

setting a synchronization indicator to a first state;

examining an isochronous [data] packet to determine whether it contains a data marker;

if said isochronous [data] packet does not contain said data marker, discarding said isochronous [data] packet and repeating said examining with another isochronous [data] packet if necessary;

if said isochronous [data] packet contains said data marker, checking whether said synchronization indicator is set to a second state;

if said synchronization indicator is set to said second state, outputting said isochronous [data] packet to a requesting device;
if said synchronization indicator is not set to second state, checking whether said isochronous data packet corresponds to start of a frame;
if said isochronous [data] packet corresponds to start of said frame, setting said synchronization indicator to said second state and outputting said isochronous [data] packet to said requesting device; and
repeating said examining with another isochronous [data] packet if necessary.

11. (Currently Amended) The system according to claim 4, wherein upon retrieving data items from said storage medium, said isochronous data processor uses said data marker to synchronize data delivery to said device.

12. (Currently Amended) The system according to claim 11, wherein said data delivery is synchronized in that said data delivery begins with an isochronous data packet [which] that corresponds to a frame boundary.

13. (Currently Amended 1) The system according to claim 4, wherein a record is stored in a buffer in the following order: the data marker, an isochronous header, and a plurality of the data [packets] items.

14. (Original) The system according to claim 13, wherein the record is stored on a hard disk.

15. (Currently Amended) The system according to claim 4, wherein the data marker is used to [determine] locate the start of a [packet] frame.

16. (Currently Amended) The system according to claim 15, wherein the firmware control synchronizes data delivery [packet is synchronized] to the start of a frame.

17. (Currently Amended) The system according to claim 16, wherein packets are discarded until a frame [start] boundary is detected.

18. (Currently Amended) The system according to claim 4, wherein [re-synchronization of] data delivery is in response to a request for data from the device.

19. (Currently Amended) A method for synchronizing isochronous [data] packets for delivery to a device, the method executing in a processing system comprising the following performed by a processor:

receiving a stream of isochronous [data] packets;

inserting a data marker at beginning of each of said isochronous [data] packets;

and

storing said data markers and their associated isochronous [data] packets on a storage medium[, wherein data markers are used to re-synchronize data delivery to said device when said data delivery contains a corrupted packet]

in response to a request for delivery of the stored data packets, synchronizing the delivery process by:

reading a data item to determine if it is a data marker;
when said data marker is identified, reading the next data item to acquire an associated isochronous header;
determining if the payload associated with said isochronous header is a frame boundary;
if said packet is not a frame boundary, discarding said packet and repeating said reading and determining steps;
if said packet is a frame boundary, deliver packet to the device.

20. (Original) The method of claim 19, further comprising:
using the data marker to synchronize data delivery to the device.

21. (Currently Amended) The method of claim 20, wherein said data delivery is synchronized in that said data delivery begins with an isochronous [data]packet [which] that corresponds to a frame boundary.

22. (Currently Amended) The method of claim 19, further comprising:
storing a record in a buffer in the following order: the data marker, an isochronous header, and a plurality of the data [packets] items.

23. (Original) The method of claim 22, wherein the record is stored on a hard disk.

24. (Currently Amended) The method of claim [19, wherein the data marker is used to determine the start of a packet] 23, further comprising transferring at least one record from said hard disk to said buffer prior to said reading and determining steps.

25. (Currently Amended) The method of claim 24, wherein the packet is synchronized to the start of a frame by selectively discarding packets in said record until a frame boundary is detected.

26. (Canceled)

27. (Canceled)

28. (New) The method of claim 24 further comprising:
detecting a corrupted packet;
discarding subsequent data items until a marker is detected; and
repeating said reading, determining, discarding and delivering steps.

29. (New) The method of claim 19 further comprising:
detecting a corrupted packet;

discarding subsequent data items until a marker is detected; and
repeating said reading, determining, discarding and delivering steps.